



OICE

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/016,447

DATE: 02/06/2002

TIME: 15:46:12

Input Set : N:\Crif3\RULE60\10016447.raw

Output Set: N:\CRF3\02062002\J016447.raw

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1 <110> APPLICANT: Kirschner, Marc W.
2   Kinoshita, Noriyuki
3 <120> TITLE OF INVENTION: Receptor-Ligand Assay
4 <130> FILE REFERENCE: HU95-01A2
5 <140> CURRENT APPLICATION NUMBER: 10/016,447
6 <141> CURRENT FILING DATE: 2001-12-10
7 <150> PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US/08/776,207
W--> 8 <151> PRIOR FILING DATE: EARLIER FILING DATE: 1997-06-23
9 <150> PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 08/441,629
W--> 10 <151> PRIOR FILING DATE: EARLIER FILING DATE: 1995-05-15
11 <150> PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 08/279,217
W--> 12 <151> PRIOR FILING DATE: EARLIER FILING DATE: 1994-07-22
13 <160> NUMBER OF SEQ ID NOS: 18
14 <170> SOFTWARE: FastSEQ for Windows Version 3.0
16 <210> SEQ ID NO: 1
17 <211> LENGTH: 809
18 <212> TYPE: DNA
19 <213> ORGANISM: Xenopus laevis
20 <400> SEQUENCE: 1
21   accaaaagaa cgacagaacg aaggaaagac agagacagtc cttgttttaa gactccaggg      60
22   gaatttacgt ctaataaaga gaagagaggc attgtatgct tgacattatg gtggcagttt      120
23   tatcttctct gttgacaatt tgcattatcc tcagcttttc tctcccatcc gatacccaga      180
24   atatcaatgc ctttatggaa aagcacattg ttaaggaagg agctgaaaca aactgcaacc      240
25   aaaccatcaa agacagaaac atccggttta aaaacaactg caaattccgc aacaccttta      300
26   ttcatgatac caatggtaaa aagggtgaagg agatgtgcgc tgggattgtc aaatctacct      360
27   ttgtgatcag caaggaactg ctgcctctca ctgactgctt gttgatggga cgtactgcaa      420
28   gacccccaaa ttgtgcttat aatcaaacaa gaacaactgg ggtcattaat atcacttggtg      480
29   aaaacaatta ccctgtgcac tttgctgggt acaaatcaag cttctgtgct tcatattctc      540
30   catgtgcctt aatagtaata actgttttcc tgctcagcca gctactgctc cctgctatga      600
31   gatgatgccc agaaacggga gtatcaatag ctaaaactag aaggactgat agtgatggat      660
32   gattgttcct aagtcattta gagatctacc tgtgttcaact tccaaacaaa gaagacatag      720
33   gtataattga atcaaccgtg acatagactg acttctaaat aataaaagca acattttctg      780
34   ttttaacaaa aaaaaaaaaa aaaaaaaaaa
36 <210> SEQ ID NO: 2
37 <211> LENGTH: 169
38 <212> TYPE: PRT
39 <213> ORGANISM: Xenopus laevis
40 <400> SEQUENCE: 2
41   Met Leu Asp Ile Met Val Ala Val Leu Ser Ser Leu Leu Thr Ile Cys
42   1           5           10           15
43   Ile Ile Leu Ser Phe Ser Leu Pro Ser Asp Thr Gln Asn Ile Asn Ala
44   20           25           30
45   Phe Met Glu Lys His Ile Val Lys Glu Gly Ala Glu Thr Asn Cys Asn

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46		35		40		45	
47	Gln Thr Ile Lys Asp Arg Asn Ile Arg Phe Lys Asn Asn Cys Lys Phe						
48	50		55		60		
49	Arg Asn Thr Phe Ile His Asp Thr Asn Gly Lys Lys Val Lys Glu Met						
50	65		70		75		80
51	Cys Ala Gly Ile Val Lys Ser Thr Phe Val Ile Ser Lys Glu Leu Leu						
52	85		90		95		
53	Pro Leu Thr Asp Cys Leu Leu Met Gly Arg Thr Ala Arg Pro Pro Asn						
54	100		105		110		
55	Cys Ala Tyr Asn Gln Thr Arg Thr Thr Gly Val Ile Asn Ile Thr Cys						
56	115		120		125		
57	Glu Asn Asn Tyr Pro Val His Phe Ala Gly Tyr Lys Ser Ser Phe Cys						
58	130		135		140		
59	Ala Ser Tyr Ser Pro Cys Ala Leu Ile Val Ile Thr Val Phe Leu Leu						
60	145		150		155		160
61	Ser Gln Leu Leu Leu Pro Ala Met Arg						
62	165						
64	<210> SEQ ID NO: 3						
65	<211> LENGTH: 1633						
66	<212> TYPE: DNA						
67	<213> ORGANISM: Xenopus Laevis						
68	<400> SEQUENCE: 3						
69	atttaccacc gaccgttaca cctggttttt gctaaggaca cattcaatac aagaactaaa						60
70	agtgggaac tggggccttt gcagaaaaca atgcagtttt taagatttct tgccatcctt						120
71	attttctctg ctaaaccattt tatcaagcat tgcaaagggtg aaacttgcat gggactgaac						180
72	tgtaatgacc caaggttatt ggaggcaatt aagagcaaca caatcaatca gctcttgcat						240
73	gatacaatta atgccacca tggaaagagt ccaccaaatt ccactaaaac cttgcccttc						300
74	ttgggtatca cagacagtaa gaaattgaat agaaaatgct gtcagaatgg aggcacttgt						360
75	ttcttgggga ccttttgcat ctgccctaag caatttactg gtcggcactg tgaacatgaa						420
76	aggaggccag caagctgtct cgggtgtccc catggagact ggatccgtca gggctgcttg						480
77	ctgtgtagat gtgtgtctgg tgtcctacac tgcttcaagc ccgagtctga ggactgtgat						540
78	gttgtgcatg aaaaaaacat gagatcgggg gtcccagaaa tgcagctcag cttaatcatc						600
79	tattgcttcc ttactgcaaa cttgttttac cacatagttt ggcactctgaa tattggactt						660
80	taacagagta acttgagtct gccagtcagg ttcagattgc agacgtctgt gtctacactg						720
81	cactttcaat ttgtgaacct attttgccag gattatgctt gaagtatatg gctatcttcc						780
82	acccttgaa tcttgaaaa tatgcagaaa ctatacaatg ccttatttct attggttggt						840
83	tcataaaata acttttttta taggatgatg tgtatagtgg ccagaatggg tttacagtac						900
84	ttccaagcac tggcgttggt tcaaaatagc tactgggttc ttgctctttg ctgcatgttg						960
85	agatcaggaa gctagtctta tacttaccca gtgcattctg tatatatgta aattttatta						1020
86	acttattaga caogttgtac attaacagca tccttcacaa acttttattt ttttttaatt						1080
87	tttttattaa ttgacaaaga gaacaaagta tctaggaaca ttttacaatt attgtcctac						1140
88	tacattgcat gttgtggttc ttgtttgtat gtttgcctcg atcttctaca atgtatccct						1200
89	agccataaaa cgattttgtg agtgtgtgtg tgtgactgca tccattttta ttcattatgc						1260
90	aaacactttg caaatgattg tgcagcaatg taagtgtctag cctgtgggtca acagtgtctga						1320
91	atgtaaatct tggagcgggtg atatcagcat gcttatggag gctcaataac cttgggtcttg						1380
92	cccctttaaa ttctattttt ctacgggcaa gtaaatctaa actgggtaaag taccttcttt						1440
93	taaggaaatg aatcactgaa tgttataatt ccagtttcag gccacagaca attaatgaca						1500
94	gctcagggaa taatacaatt gcccatgttt gatgcaccta atgtactgta tgtattacag						1560
95	ggtgtctgct tgatgtttgc aatgaagaca ttaaatactg tacctaaaag aaaaaaaaaa						1620

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1633

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96      aaaaaaaaaa aaa
98 <210> SEQ ID NO: 4
99 <211> LENGTH: 190
100 <212> TYPE: PRT
101 <213> ORGANISM: Xenopus laevis
102 <400> SEQUENCE: 4
103      Met Gln Phe Leu Arg Phe Leu Ala Ile Leu Ile Phe Ser Ala Lys His
104      1              5              10              15
105      Phe Ile Lys His Cys Lys Gly Glu Thr Cys Met Gly Leu Asn Cys Asn
106      20              25              30
107      Asp Pro Arg Leu Leu Glu Ala Ile Lys Ser Asn Thr Ile Asn Gln Leu
108      35              40              45
109      Leu His Asp Thr Ile Asn Ala Thr His Gly Lys Ser Pro Pro Lys Ser
110      50              55              60
111      Thr Lys Thr Leu Pro Phe Leu Gly Ile Thr Asp Ser Lys Lys Leu Asn
112      65              70              75              80
113      Arg Lys Cys Cys Gln Asn Gly Gly Thr Cys Phe Leu Gly Thr Phe Cys
114      85              90              95
115      Ile Cys Pro Lys Gln Phe Thr Gly Arg His Cys Glu His Glu Arg Arg
116      100             105             110
117      Pro Ala Ser Cys Ser Gly Val Pro His Gly Asp Trp Ile Arg Gln Gly
118      115             120             125
119      Cys Leu Leu Cys Arg Cys Val Ser Gly Val Leu His Cys Phe Lys Pro
120      130             135             140
121      Glu Ser Glu Asp Cys Asp Val Val His Glu Lys Asn Met Arg Ser Gly
122      145             150             155             160
123      Val Pro Arg Met Gln Leu Ser Leu Ile Ile Tyr Cys Phe Leu Thr Ala
124      165             170             175
125      Asn Leu Phe Tyr His Ile Val Trp His Leu Asn Ile Gly Leu
126      180             185             190
128 <210> SEQ ID NO: 5
129 <211> LENGTH: 124
130 <212> TYPE: PRT
131 <213> ORGANISM: Bovine
132 <400> SEQUENCE: 5
133      Ala Gln Asp Asp Tyr Arg Tyr Ile His Phe Leu Thr Gln His Tyr Asp
134      1              5              10              15
135      Ala Lys Pro Lys Gly Arg Asn Asp Glu Tyr Cys Phe Asn Met Met Lys
136      20              25              30
137      Asn Arg Arg Thr Arg Pro Cys Lys Asp Arg Asn Thr Phe Ile His Gly
138      35              40              45
139      Asn Lys Asn Asp Ile Lys Ala Ile Cys Glu Asp Arg Asn Gly Gln Pro
140      50              55              60
141      Tyr Arg Gly Asp Leu Arg Ile Ser Lys Ser Glu Phe Gln Ile Thr Ile
142      65              70              75              80
143      Cys Lys His Lys Gly Gly Ser Ser Arg Pro Pro Cys Arg Tyr Gly Ala
144      85              90              95
145      Thr Glu Asp Ser Arg Val Ile Val Val Gly Cys Glu Asn Gly Leu Pro
146      100             105             110

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147      Val His Phe Asp Glu Ser Phe Ile Thr Arg Pro His
148              115                      120
150 <210> SEQ ID NO: 6
151 <211> LENGTH: 131
152 <212> TYPE: PRT
153 <213> ORGANISM: Chinese Hamster
154 <400> SEQUENCE: 6
155      Val Gln Pro Ser Leu Gly Lys Glu Ser Ala Ala Met Lys Phe Glu Arg
156              1              5              10              15
157      Gln His Met Asp Ser Thr Val Ala Thr Ser Ser Ser Pro Thr Tyr Cys
158              20              25              30
159      Asn Gln Met Met Lys Arg Arg Asn Met Thr Gln Gly Gln Glu Cys Lys
160              35              40              45
161      Pro Val Asn Thr Phe Val His Glu Ser Leu Ala Asp Val His Ala Val
162              50              55              60
163      Cys Ser Gln Glu Asn Val Lys Cys Lys Asn Gly Lys Ser Asn Cys Tyr
164      65              70              75              80
165      Lys Ser His Ser Ala Leu His Ile Thr Asp Cys Arg Leu Lys Gly Asn
166              85              90              95
167      Ala Lys Tyr Pro Asn Cys Asp Tyr Gln Thr Ser Gln His Gln Lys His
168              100             105             110
169      Ile Ile Val Ala Cys Glu Gly Asn Pro Phe Val Pro Val His Phe Asp
170              115             120             125
171      Ala Thr Val
172              130
174 <210> SEQ ID NO: 7
175 <211> LENGTH: 160
176 <212> TYPE: PRT
177 <213> ORGANISM: Mus musculus
178 <400> SEQUENCE: 7
179      Met Gly Tyr Phe Ser Ser Ser Val Val Leu Leu Val Ala Ile Ser Ser
180              1              5              10              15
181      Ala Phe Glu Phe Gly Pro Val Ala Gly Arg Asp Leu Ala Ile Arg Asp
182              20              25              30
183      Asn Ser Ile Trp Asp Gln Lys Glu Pro Ala Val Arg Asp Arg Ser Phe
184              35              40              45
185      Gln Phe Val Pro Ser Val Gly Ile Gln Asn Ser Lys Ser Leu Asn Lys
186              50              55              60
187      Thr Cys Cys Leu Asn Gly Gly Thr Cys Ile Leu Gly Ser Phe Cys Ala
188      65              70              75              80
189      Cys Pro Pro Ser Phe Tyr Gly Arg Asn Cys Glu His Asp Val Arg Lys
190              85              90              95
191      Glu His Cys Gly Ser Ile Leu His Gly Thr Trp Leu Pro Lys Lys Cys
192              100             105             110
193      Ser Leu Cys Arg Cys Trp His Gly Gln Leu His Cys Leu Pro Gln Thr
194              115             120             125
195      Phe Leu Pro Gly Cys Asp Gly His Val Met Asp Gln Asp Leu Lys Ala
196              130             135             140
197      Ser Arg Thr Pro Cys Gln Thr Pro Ser Val Thr Thr Thr Phe Met Leu

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Output Set: N:\CRF3\02062002\J016447.raw

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198      145      150      155      160
200 <210> SEQ ID NO: 8
201 <211> LENGTH: 150
202 <212> TYPE: PRT
203 <213> ORGANISM: Homo sapien
204 <400> SEQUENCE: 8
205      Met Ala Ala Gly Ser Ile Thr Thr Leu Pro Ala Leu Pro Glu Asp Gly
206          1          5          10          15
207      Gly Ser Gly Ala Phe Pro Pro Gly His Phe Lys Asp Pro Lys Arg Leu
208          20          25          30
209      Tyr Cys Lys Asn Gly Gly Phe Phe Leu Arg Ile His Pro Asp Gly Arg
210          35          40          45
211      Val Asp Gly Val Arg Glu Lys Ser Asp Pro His Ile Lys Leu Gln Leu
212          50          55          60
213      Gln Ala Glu Glu Arg Gly Val Val Ser Ile Lys Gly Val Cys Ala Asn
214          65          70          75          80
215      Arg Tyr Leu Ala Met Lys Glu Asp Gly Arg Leu Leu Ala Ser Lys Cys
216          85          90          95
217      Val Thr Asp Glu Cys Phe Phe Phe Glu Arg Leu Glu Ser Asn Asn Tyr
218          100         105         110
219      Asn Thr Tyr Arg Ser Arg Lys Tyr Thr Ser Trp Tyr Val Ala Leu Lys
220          115         120         125
221      Arg Thr Gly Gln Tyr Lys Leu Gly Ser Lys Thr Gly Pro Gly Gln Lys
222          130         135         140
223      Ala Ile Leu Phe Leu Pro
224          145         150
226 <210> SEQ ID NO: 9
227 <211> LENGTH: 149
228 <212> TYPE: PRT
229 <213> ORGANISM: Bovine
230 <400> SEQUENCE: 9
231      Met Ala Glu Gly Glu Thr Thr Thr Phe Thr Ala Leu Thr Glu Lys Phe
232          1          5          10          15
233      Asn Leu Pro Leu Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys Ser
234          20          25          30
235      Asn Gly Gly Tyr Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp Gly
236          35          40          45
237      Thr Lys Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Cys Ala Glu
238          50          55          60
239      Ser Ile Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Phe Leu
240          65          70          75          80
241      Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn Glu
242          85          90          95
243      Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr Tyr
244          100         105         110
245      Ile Ser Lys Lys His Ala Glu Lys His Trp Phe Val Gly Leu Lys Lys
246          115         120         125
247      Asn Gly Arg Ser Lys Leu Gly Pro Arg Thr His Phe Gly Gln Lys Ala
248          130         135         140

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## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/016,447

DATE: 02/06/2002

TIME: 15:46:13

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Output Set: N:\CRF3\02062002\J016447.raw

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L:10 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD  
L:12 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD